

CLAIMS

- 1.- Oil from seeds, said oil comprising:
an oleic acid content of more than 5% and less than 65% by weight based upon the total fatty acid content, a linoleic acid content of more than 1% and less than 65% by weight based upon the total fatty acid content, a palmitic acid content of more than 20% and less than 40% by weight based upon the total fatty acid content, a stearic acid content of more than 3% and less than 15% based upon the total fatty acid content, characterized in that the palmitoleic acid content is less than 4% based upon the total fatty acid content and the asclepic acid content is less than 4% based upon the total fatty acid content.
- 2.- Oil from seeds according to claim 1, characterized in that the palmitoleic acid content is less than 3% based upon the total fatty acid content.
- 3.- Oil from seeds according to claim 1, characterized in that the asclepic acid content is less than 2% based upon the total fatty acid content.
- 4.- Oil from seeds according to claim 1, characterized in that the oleic acid content is at least 40% by weight based upon the total fatty acid content.
- 5.- Oil from seeds according to claim 1, characterized in that the total level of saturated fatty acids is at least 24% by weight based upon the total fatty acid content.
- 6.- Oil from seeds according to claim 5, characterized in that the total level of saturated fatty acids is at least 35% by weight based upon the total fatty acids content.
- 7.- Oil from seeds according to claim 6, characterized in that the total level of saturated fatty acids is at least 45% by weight based upon the total fatty acids content.
- 8.- Oil from seeds according to claim 1, characterized in that the linoleic acid content is less than 18% by weight based upon the total fatty acids content.

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9.- Oil from seeds according to claim 1, characterized in that the oil has less than 10% by weight of the saturated fatty acid groups in the 2 position of the triacylglycerol molecules of the oil.

10.- Oil from seeds according to claim 9, characterized in that the oil has a maximum of 5% of the saturated fatty acid groups in the 2 position of the triacylglycerol molecules of the oil.

11.- Oil from seeds according to claim 1, which oil is a sunflower oil.

12.- Oil from seeds according to claim 11, characterized in that the oil is extracted from sunflower seeds obtained by crossing sunflower seeds of the mutant sunflower line IG-1297M deposited on 20 January 1998 with ATCC under deposit accession number ATCC-209591 with the mutant sunflower line CAS-3, deposited on 14 December 1994 with the ATCC under deposit accession number ATCC-75968.

13.- Sunflower seeds comprising a sunflower oil having:

an oleic acid content of more than 5% and less than 65% by weight based upon the total fatty acid content,

a linoleic acid content of more than 1% and less than 65% by weight based upon the total fatty acid content,

a palmitic acid content of more than 20% and less than 40% by weight based upon the total fatty acid content,

a stearic acid content of more than 3% and less than 15% based upon the total fatty acid content,

characterized in that the palmitoleic acid content is less than 4% based upon the total fatty acid content, and;

the asclepic acid content is less than 4% based upon the total fatty acid content.

14.- Sunflower seeds comprising a sunflower oil according to claim 2.

15.- Method for preparing sunflower seeds as claimed in 13, comprising the steps of:

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- a) crossing sunflower seeds of the mutant sunflower line IG-1297M deposited on 20 January 1998 with ATCC under deposit accession number ATCC-209591 with the mutant sunflower line CAS-3, deposited on 14 December 1994 with the ATCC under deposit accession number ATCC-75968.
 - b) self-pollinating F1 progeny plants of step a) for at least two generations to produce inbred plants.
 - c) selecting from the progeny of step b) plants with seeds containing an oil having a palmitic acid content of more than 20%, a palmitoleic acid content of less than 4% and an asclepic acid content of less than 3%.
 - d) collecting progeny seeds from step c) and optionally
 - e) repeating the cycle of culturing, selection and collection of seeds.

16.- Method for preparing sunflower oil according to claim 1, by extracting sunflower seeds as claimed in claim 1.

17.- Use of oil according to claim 1 at high temperature conditions.

18.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute baking.

19.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute cooking.

20.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute roasting.

21.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute heating by any means at temperatures of at least 70°C.

22.- Use of oil in claim 1 in the production of edible fats or fat mixtures, such as margarine or vegetable-dairy.

23.- Use of oil in claim 1 in confectionery or bakery.